LPDES PERMIT No. LA0006131, Al No. 11287

LPDES FACT SHEET and RATIONALE

FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMIATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

I. COMPANY/FACILITY NAME:

Valentine Paper, Inc. Valentine Paper

139 Joe Brown Road Lockport, LA 70374

II. ISSUING OFFICE:

Louisiana Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

III. PREPARED BY:

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DATE PREPARED:

July 1, 2009

IV. PERMIT ACTION/STATUS:

A. Reason For Permit Action:

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR122.46.

<u>LAC 33:IX Citation:</u> Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citation: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F., 4901, and 4903.

B. LPDES permit: Effective date - August 1, 2003

Expiration date – September 29, 2008 EPA has not retained enforcement authority.

C. Date Application Received: The permit renewal application was received by this Office on February 21, 2008. Additional information was submitted on December 22, 2008.

V. FACILITY INFORMATION:

- Location- 139 Joe Brown Road in Lockport, Lafourche (Latitude 30°38'59", Longitude 91°16'38")
- B. Applicant Activity- The applicant operates a non-integrated paper mill that uses virgin and secondary pulp. The pulp arrives by truck and railroad cars. The material is repulped in three hydropulpers. The resulting pulp is then refined and

continuously fed to one of two paper machines. The chemicals vary with the manufacturing grade of the paper. The sheets of suspended pulp and additives are drained, dried, and pressed into paper. All paper then goes to the slitter, where it is processed into rolls. The majority of paper is old in roll form. Smaller quantities are cut into various sheet sizes and sold. The finished paper is shipped out of the facility via trucks or railroad cars. The facility is presently closed and is looking for a buyer; however, Valentine Paper has requested in a letter dated 12/22/08 that the most recent mill production levels be maintained for the LPDES permit renewal.

C. Technology Basis – 40 CFR Chapter I, Subchapter N (Effluent Guidelines and Standards) parts 401, 405-415 and 417-471 have been adopted by reference at LAC 33:IX.4903.

Guidelines

Reference

Pulp, Paper, and Paperboard

40 CFR Part 430, Subparts I and K

Other sources of technology based limits: Current LPDES permit (effective August 1, 2003) Best Professional Judgement

- D. Fee Rate
 - a. Fee Rating Facility Type: Major
 - b. Complexity Type: III
 - c. Wastewater Type: Il
 - d. SIC code(s): 2621
- E. Continuous Facility Effluent Flow (Max 30-Day) 11.5 MGD
- F. The facility is physically located in Subsegment 020304 (Lake Salvador) of the Barataria Basin, however the discharge is located in Subsegment 020801 (Intracoastal Waterway-From Larose to Bayou Villars and Bayou Barataria) of the Barataria Basin. Therefore, subsegment 020801 will be used for permitting purposes.
- VI. RECEIVING WATERS: Intracoastal Waterway via Forty Arpent Canal
 - A. TSS (15%), mg/l: 10.6 mg/l
 - B. Average Hardness, mg/l CaCO₃: 142
 - C. Critical Flow, cfs: 0.1
 - D. Mixing Zone Fraction: 0.33
 - E. Harmonic Mean Flow, cfs: 1
 - F. River Basin: Barataria, Subsegment No. 020801
 - G. Designated Uses:

The designated uses are primary contact recreation, secondary contact recreation and fish and wildlife propagation

Information based on the following LAC 33:IX. Chapter 11 and memorandum from Todd Franklin to Paula M. Roberts dated March 11, 2008. The Hardness and 15% TSS data were obtained from random sampling site No. 2464 in Forty Arpent Canal near the pump station on Parish Rd., 1.8 miles northeast of Valentine, LA.

Since the Forty Arpent Canal is closed with a pump station moving the water out of the canal and into the Intracoastal Waterway, the 7Q10 is 0.1 cfs and the harmonic mean is 1 cfs for Outfall 001.

VII. OUTFALL INFORMATION:

Outfall 001

- A. Type of wastewater Treated combined process wastewater, sanitary wastewater, utility wastewater and stormwater runoff
- B. Location At the point of discharge through the final effluent weir to the Forty Arpent Canal prior to combining with other waters. (Latitude 29°38'0", Longitude 90°28'30")
- C. Treatment Sanitary is pretreated in a package activated sludge unit prior to discharge along with total mill effluent into the impoundment system. The impoundment system consists of a series of treatment lagoons in series: 480 acre Primary Sedimentation pond facultative oxidation pond with primary settling and biolifitration/uptake of fine paper solids by pond vegetation. One 5 acre and one 15 acre aeration lagoons-facultative oxidation and sedimentation, a 90 acre Polishing Pond—also a facultative pond with biolifitration and uptake from vegetation and a 0.25 acre Finishing Pond followed by final discharge weir.
- D. Flow Continuous, Max 30-Day, 11.5 MGD
- E. Receiving Waters Intracoastal Waterway via Forty Arpent Canal
- F. Basin and subsegment Barataria, 020801

VIII. CURRENT EFFLUENT LIMITS:

See Appendix B - LPDES permit limits

IX. PROPOSED PERMIT LIMITS:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes from the Current LPDES permit include:

- 1) The loadings for BOD₅ and TSS have changed and are based upon updated production values presented in a letter dated 12/22/08 from Irion (KSI Environmental Consultants) to Roberts (LDEQ).
- 2) A requirement has been place in the permit requiring the permittee to submit analytical data for Volatiles Organic Chemicals and Acids Extractable Organic Chemicals. (See Section XVII. of this factsheet for additional information).

X. PERMIT LIMIT RATIONALE:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44(a) and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. <u>TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS</u>

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(I) (2) (ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirement pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever is more stringent.

B. <u>TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS</u>

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44 (a) require technology-based effluent limitations to be placed in LPDES permits effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII. Regulations also require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX32715/40 CFR 122.48 (b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(i)].

1. Outfall 001 – Treated combined process wastewater, sanitary wastewater, utility wastewater and stormwater runoff

Valentine Paper, Inc. is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing OperationGuidelineSecondary Fiber Deink Subcategory40 CFR 430.92, Subpart 1

Fine and Lightweight Papers from
Purchased Pulp Subcategory
40 CFR 430.112, Subpart K

The facility uses virgin and secondary pulp. Virgin pulp production falls under the Fine and Lightweight Papers from Purchased Pulp subcategory. Secondary pulp production falls under the Secondary Fiber Deink subcategory. Two sets of permit limitations and conditions are included to cover the two production processes.

OUTFALL 001 - during secondary pulp deink operations

PARAMETER(S)	MASS, LBS/DAY		CONCENTRATION,		MEASUREMENT
	unless othe	unless otherwise stated		G/L	FREQUENCY
	<u> </u>			rwise stated	
•	MONTHLY	DAILY	MONTHLY	DAILY	
	AVERAGE	MAXIMUM.	AVERAGE	MAXIMUM	
Flow, MGD	Report	Report			Continuous
BOD	3008	5792	10	15	3/week
TSS	4144	7696			3/week
pH (Standard Units)			6.0 (*1) (Min)	9.0 (*1) (Max)	1/day

^(*1) The permittee shall report on the Discharge monitoring reports both the minimum and maximum instantaneous pH values measured.

OUTFALL 001 - during virgin pulp operations

PARAMETER(S)	MASS,	MASS, LBS/DAY unless otherwise stated		TRATION,	MEASUREMENT
	unless othe			G/L erwise stated	FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report			Continuous
BOD	1360	2624	10	15	3/week
TSS	1888	3520			3/week
pH (Standard Units)			6.0 (*1) (Min)	9.0 (*1) (Max)	1/week

^(*1) The permittee shall report on the Discharge monitoring reports both the minimum and maximum instantaneous pH values measured.

Calculations and basis of permit limitations are found at Appendix A-1 and associated appendices. See below for site-specific considerations.

Site-Specific Considerations

The permittee is subject to the Best Available Technology Economically Achievable (BAT) for the control of Pentachlorphenol or Trichlorophenol. However, in previous applications the permittee has certified that chlorophenolic-containing biocides are not used at the facility. Therefore, supplemental BAT effluent limitations and monitoring requirements for Pentachlorophenol and Trichlorophenol have not been established in this draft permit in accordance with 40 CFR 430.94 and 430.114.

Also, concentration-based limits for BOD₅ of 10 mg/l Daily average and 15 mg/l Daily maximum are continued from the LPDES permit that became effective on February 1, 1996 and the current permit with the effective date of August 1, 2003.

C. WATER QUALITY BASED EFFLUENT LIMITATIONS

Technology based effluent limitations and/or specific analytical results from the permittee's application were not screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. Calculations, results, and documentation are given in Appendix B.

In accordance with LAC 33:IX.2707.D.1./40 CFR 122.44(d)(1), the existing discharge(s) were not evaluated in accordance with the <u>Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards</u>, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." The permittee did not submit lab data for Outfall 001 with the February 21, 2008 renewal application. Therefore, the Volatiles and Acid Compounds were not tested. Please refer to the reopener clause listed in Section XVII of this factsheet for further details regarding the submittal of these pollutants for screening.

The Department feels that upon submittal of the requested data, it can be evaluated and a screen performed if necessary. This is based upon the review of the previously submitted analytical results and Water Quality Based Screens performed for the previous two permits which revealed that no Water Quality Based Effluent Limits were imposed.

TMDL Waterbody

The discharge from Outfall 001 is into the Intracoastal Waterway via Forty Arpent Canal, Subsegment No. 020801 of the Barataria Basin. This subsegment is listed on LDEQ's 2006 305(b)/303(d) Integrated Report with FINAL additions dated August 17, 2005, as fully supporting its designated uses. Therefore, there are no impairments of concern and no additional permit limitations have been included in this permit.

D. <u>BIOMONITORING REQUIREMENTS</u>

The provisions of this section apply to Outfall 001.

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols (See Attachment Biomonitoring Frequency Recommendation and Rationale for Additional Requirements).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfalls 001 are as follows:

TOXICITY TESTS

FREQUENCY

Ceriodaphnia dubia Chronic static renewal 7-day survival and reproduction test (Method 1002.0)

1/quarter

<u>Pimephales promelas</u> chronic static renewal 7-day larval survival and growth test (Method 1000.0)

1/quarter

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 31%, 42%, 56%, 75%, and 99%. The biomonitoring critical dilution is defined as 99% effluent.

XI. COMPLIANCE HISTORY/DMR REVIEW:

- A. LDEQ records were reviewed for the period from April 2004 through April 2009. The following Multi-media action was issued during this period. The findings will cover the violations that pertain to the LPDES water discharge permit LA0006131 and the solid waste permit GD-57-6961/OU-0228A. Findings:
 - An inspection conducted by the Department on or about November 20, 2002, and a
 subsequent file review on or about February 4, 2008, revealed that there was an
 overflow that occurred as reported by the respondent on 9/29/06. The location was
 the adjacent berm around culvert in conveyance ditch. The cause was a plugged

- culvert and the discharge was to Forty Arpent Canal. The amount was unknown.
- 2. An inspection conducted by the Department on or about April 25, 2007, and a subsequent file review conducted by the Department on or about February 4, 2008, revealed that the respondent caused and/or allowed an unauthorized discharge of treated wastewater, on or about April 19, 2007, from a location not authorized by the LPDES permit LA0006131. Specifically, the unauthorized discharge was occurring from an area adjacent to the permitted Outfall and was discharging at a rate of approximately one gallon per minute.
- 3. An inspection conducted by the Department on or about April 25, 2007, revealed that the respondent was not maintaining proper records. Specifically, the respondent failed to maintain a temperature log for the TSS drying oven.
- 4. An inspection conducted by the Department on or about April 25, 2007, revealed that the respondent failed to properly operate and maintain its facility. Specifically, an approved National Institute of Standards and Technology (NIST) thermometer was not being utilized to monitor the temperatures for the TSS drying oven. TSS samples were not brought to a constant weight as required by Standard Method 2540D, the samples were weighed and dried only once. The BOD₅ seed used for the BOD₅ analysis were expired at the time of the inspection.
- 5. A file review conducted by the Department on or about February 4, 2008, revealed permit excursions for the following parameters from January 1, 2002 to March 30, 2007:

Outfall 001 A

Monitoring Period	Parameter	Permit Limit	Sample Value
02/01/04-02/29/04	pН	6-9 Standard Units	9.1 Standard Units
03/01/04-03/31/04	pН	6-9 Standard Units	9.5 Standard Units

- 6. A file review conducted by the Department on or about February 4, 2008, revealed that the respondent failed to submit Non-Compliance Reports (NCRs). Specifically, the respondent failed to submit a NCR for March 2004.
- 7. A file review conducted on or about February 4, 2008, revealed that the respondent failed to submit a Discharge Monitoring Permit (DMR) for the fourth quarter of 2007 for the whole effluent toxicity testing.

(Please note that the letter after the outfall number represents the monitoring frequency for that outfall.)

8. There was an unauthorized discharge of approximately 290 gallons of sodium hypochlorite to a conveyance ditch which leads to the facility's treatment pond that discharges into Forty Arpent Canal.

The permittee responded in letter dated April 30, 2008.

B. A DMR review of the monitoring reports for the period of August 2003 through April 2009 revealed that the facility has reported the following effluent violations.

Outfall 001A

Date	Parameter	Daily Maximum	Permit Limit Daily Max
February 29, 2004	pН	9.1	6-9 Standard Units
March 31, 2004	рН	9.5	6-9 Standard Units
July 31, 2008	рН	0*	6-9 Standard Units

August 30, 2008	BOD ₅	20 mg/l	15 mg/l
November 30, 2008	рH	0*	6-9 Standard Units

Outfall 001B

Date .	Parameter	Daily Maximum	Permit Limit
November 30, 2008	рН	0*	6-9 Standard Units

^{*}The permittee reported 0 as a value for all parameters, but there were no remarks in "Comment section" or any notation that there was No Discharge.

C. A review of EDMS and TEMPO revealed the following inspections during the period April 2007 through April 2009.

The most recent inspection was performed on December 18, 2007. Findings:

- Inspection was done to determine compliance with LA0006131 (water) and GD-57-6961/P-0277 (solid waste impoundment).
- 2. Annual solid disposal report April 2006-2007 was not received by LDEQ until 9/12/07. The report was due 8/1/07.
- All water related areas of concern noted during previous inspection have been corrected.
- 4. The facility will cease operations on 12/31/07. According to Mr. Moen, the company plans to keep its permits active until the future of the facility can be determined at a later date.

The following inspection was performed on April 25, 2007. This inspection was conducted to determine the facility's compliance with its water discharge permit – LA0006131 as well as solid waste permit GD-57-6961/OU-0228A. Findings:

- 1. Annual solid waste reports for 04-05 and 05-06 were not submitted to LDEQ until Oct. 2006.
- 2. October 2005 DMR submitted without flow readings.
- 3. Small bypass/unpermitted discharge from area adjacent to outfall. The volume at the time of inspection was estimate to be around 1 gallon per minute. The discharge was first observed on 4/19/07, and sandbagged to reduce the flow. The area will be repaired as soon as possible, and the additional flow will be calculated and added to reports until next time.
- 4. No temperature log is being kept on TSS drying oven. The temperature is read off of digital thermometer or oven. (No NIST thermometer available).
- 5. TSS sample are not brought to constant weight. Samples are dried and only weighed once.
- 6. BOD, seed was expired.
- 7. Facility reported no flow for April 2006-July 28, 2007. This was verified by glow chart stripes.

XII. "IT" QUESTIONS – APPLICANT'S RESPONSES

This application is for an LPDES permit renewal with no major modifications or additions, therefore, responses to these questions are not required per LA. R.S. 30:2018.E.

XIII. ENDANGERED SPECIES:

The receiving waterbody, Subsegment No. 020801 of the Barataria Basin has not been identified by the U. S. Fish and Wildlife Service as habitat for any endangered species. This type of discharge is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

XIV. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits, no consultation with the Louisiana State Historic Preservation Officer is required.

XV. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XVI. VARIANCES:

No requests for variances have been received by this Office.

XVII. REOPENER CLAUSE:

Please note, this existing facility is subject to Chapter 25 of the LAC 33:IX. and in accordance with the requirements of LAC 33:IX.2501.F.7.e, each applicant with processes in one or more primary industry category (see LAC 33:IX.7101.Appendix A) shall submit quantitative data for pollutants at each outfall containing process wastewater. Since the process at this facility falls under the Pulp and Paper Mill Category, the permittee is required to submit quantitative data for the Volatile Organic Chemicals and the Acids Extractable Organic Chemicals (Please refer to LAC 33:IX.7107.Appendix D, Table 1 and Table 1.A). Therefore, for Outfall 001, the permittee shall submit analytical data for this outfall no later than one year after restart of operations at the facility. Upon submittal of this analytical data, LDEQ may choose to modify, or alternatively revoke and reissue this permit to change effluent limitations based on the results of the submitted data. This provision has been added to the permit located in Part II, Section I.

XVIII. PUBLIC NOTICES:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspapers of general circulation

Office of Environmental Services Public Notice Mailing List